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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/719,341	09/25/96	MANNAVA S	13DV-12522

QM51/0222

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EXAMINER	
VERDIER, C	
ART UNIT	**PAPER NUMBER**
3745	

DATE MAILED: 02/22/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/719,341	Mannava et al.
Examiner	**Group Art Unit**
Christopher Verdier	3745

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-20* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-20* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Receipt and entry of Applicants' Preliminary Amendments dated November 24, 1998 and February 4, 1999 is acknowledged. Claims 1-20 are pending.

Declaration Under 37 CFR 1.131

The declaration filed on February 4, 1999 under 37 CFR 1.131 has been considered but is ineffective to overcome the Mannava 5,591,009 reference.

The Mannava 5,591,009 reference is a U.S. patent that claims the rejected invention. An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the patent is claiming the same patentable invention, see MPEP § 2306. Note that the same patentable invention is defined in MPEP 715.05 as when the invention is considered obvious under 35 USC 103. The specification limitation in the instant application of the peening depth of 20 to 50 mils is considered obvious.

Claim Rejections - 35 USC § 112

Claims 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 17, line 19, "third regions" is a double recitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannava '009 in view of Neal and Mallozzi 3,850,698. Mannava '009 discloses a repaired laser shock peened gas turbine engine component substantially as claimed, but does not disclose that the component is a compressor blade, and does not disclose that the laser shock peening spots are at a power density of 100-200 Joules per square centimeter.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize the repaired laser shock peened gas turbine engine component of Mannava for the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

Mallozzi '698 (figure 1 and column 5, lines 23-26) teaches that laser shock peening of a surface may occur at a power density of between 10 to 10,000 Joules per square centimeter, for the purpose of improving hardness and strength.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to perform the laser shock peening at a power density of 100-200 Joules per square centimeter, as taught by Mallozzi '698, for the purpose of improving hardness and strength.

Double Patenting

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the

"right to exclude" granted by a patent. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 3, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, and 3 of U.S. Patent No.5,591,009 in view of Neal and Mallozzi 3,850,698. Claims 1 and 3 of US Patent '009 claim substantially the same subject matter as the instant application except for the gas turbine engine component being a compressor blade, and except for the laser shock peening spots being at a power density of 100-200 Joules per square centimeter.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the gas turbine engine component of Mannava as the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

Mallozzi '698 (figure 1 and column 5, lines 23-26) teaches that laser shock peening of a surface may occur at a power density of between 10 to 10,000 Joules per square centimeter, for the purpose of improving hardness and strength.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to perform the laser shock peening at a power density of 100-200 Joules per square centimeter, as taught by Mallozzi '698, for the purpose of improving hardness and strength.

Claims 9-10, 14-15, and 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 4, 4, 4, 4, and 4, respectively, of U.S. Patent No. 5,591,009 in view of Neal and Mallozzi 3,850,698. Claim 4 of US Patent '009 claims substantially the same subject matter as the instant application except for the gas turbine engine component being a compressor blade, and except for the laser shock peening spots being at a power density of 100-200 Joules per square centimeter.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the gas turbine engine component of Mannava as the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

Mallozzi '698 (figure 1 and column 5, lines 23-26) teaches that laser shock peening of a surface may occur at a power density of between 10 to 10,000 Joules per square centimeter, for the purpose of improving hardness and strength.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to perform the laser shock peening at a power density of 100-200 Joules per square centimeter, as taught by Mallozzi '698, for the purpose of improving hardness and strength.

Claims 1-20 are also rejected under the judicially created doctrine of double patenting over claims 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, and 1, respectively, of U. S. Patent No. 5,531,570 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: All of the limitations in claim 1, lines 1-12 of US Patent 5,531,570.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Verdier whose telephone number is (703) 308-2638. The examiner can normally be reached on Monday-Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308-1044. The fax phone number for this Group is (703) 305-3588.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

CV
February 12, 1999

Christopher Verdier
Primary Examiner
Art Unit 3745